

What Is Claimed Is:

**Sub A17** 1. A loadport equipped with automatic height adjustment means comprising:

a movable platform adapted for carrying a wafer cassette thereon and for moving vertically in an up-and-down direction;

at least two support members for supporting said movable platform and for moving said platform in an up-and-down direction;

a distance sensor mounted on a bottom surface of said movable platform for measuring a height of said movable platform; and

a process controller for receiving a first signal from said distance sensor, comparing to a pre-stored datum and then sending a second signal to said at least two support members to move said movable platform until said first signal equals said pre-stored datum.

2. A loadport equipped with automatic height adjustment means according to claim 1, wherein said movable platform is a load port platform.

3. A loadport equipped with automatic height adjustment means according to claim 1, wherein said at least two support members are two support members spaced-apart each for supporting one of two ends of said movable platform.

A<sub>1</sub>  
4. A loadport equipped with automatic height adjustment means according to claim 1, wherein said at least two support members are four support members spaced-apart each for supporting one of four corners of said movable platform.

5. A loadport equipped with automatic height adjustment means according to claim 1, wherein said at least two support members further comprises a screw and a screw rail operated by a motor for moving said movable platform in an up-and-down direction.

6. A loadport equipped with automatic height adjustment means according to claim 1, wherein said at least two support members further comprises a rack and a pinion operated by a motor for moving said movable platform in an up-and-down direction.

A<sub>1</sub>

7. A loadport equipped with automatic height adjustment means according to claim 1, wherein said movable platform further comprises a leveling sensor mounted on or adjacent to a top surface of said platform.

8. A loadport equipped with automatic height adjustment means according to claim 1, wherein said movable platform further comprises a leveling sensor and a leveling means mounted on said platform.

9. A loadport equipped with automatic height adjustment means according to claim 1, wherein said distance sensor is an optical sensor.

10. A loadport equipped with automatic height adjustment means according to claim 1, wherein said distance sensor is a sonic sensor.

11. A method for automatically adjusting the height of a loadport comprising the steps of:

providing a movable platform capable of being moved in an up-and-down direction;

mounting the movable platform on at least two support members;

mounting a distance sensor on a bottom surface of said movable platform;

connecting a process controller to said distance sensor and said at least two support members;

measuring a height of said movable platform and sending a first signal to said process controller;

comparing said first signal with a pre-stored datum in said process controller and determining a deviation; and

adjusting the height of said movable platform by said at least two support members until said deviation becomes zero.

12. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of adjusting the height of said movable platform by said at least two support members wherein each being equipped with a screw and a screw rail operated by a motor.

13. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of adjusting the height of said movable platen by said at least two support members wherein each being equipped with a rack and a pinion operated by a motor.

Sub A1) 14. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of mounting a leveling sensor on said movable platform and adjusting the leveling of said platform.

15. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of measuring a height of said platform by using an optical type distance sensor.

16. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of measuring a height of said platform by using a sonic type distance sensor.

A, 17. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of mounting the movable platform at two distant ends by two support members.

18. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of mounting the movable platform at four corners by four support members.

Sub A, 19. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of measuring a height of the platform by an infrared sensor.

20. A method for automatically adjusting the height of a loadport according to claim 11 further comprising the step of measuring a height of the platform by an ultrasonic sensor.